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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,287	02/18/2004	Hiroyuki Masaki	S004-5212	3348

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EXAMINER

BROOME, SAID A

ART UNIT PAPER NUMBER

2628

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,287	Applicant(s) MASAKI, HIROYUKI	
	Examiner Said Broome	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to an amendment filed on 3/27/2006.
2. Claims 1, 8 and 15 have been amended by the applicant.
3. Claims 2-7, 9-14 and 16-20 are original.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428).

Regarding claims 1 and 8, Moyer teaches all the limitations except a display brightness control means. Moyer illustrates a portable electronic apparatus in Figure 1, as recited in the preamble. Moyer also teaches a display means for displaying a plurality of display segments in column 2 lines 18-20, and also illustrates indicating time in a display mode in element 11 of Figure 1. Moyer also teaches a manipulation means for selecting any one of the display segments displayed by the display means in column 7 lines 60-67 and column 8 lines 1-4 where it is described that the button B₃, as illustrated in Figure 1, would be used to select the display segments of the display. Moyer also teaches selecting a displayed time segment in which the time indicated in the time display mode is corrected from column 7 lines 60-67 to column 8 lines

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1-19 (“Consequently, when only the push button B_3 is depressed, the hours are being displayed and will be advanced. That is done by slewing the unit hours counter, i.e., by applying clock pulses at a rate of 1 Hz...In addition to slewing the minutes counter, the seconds counters 64 and 66 are instantaneously reset to zero at the beginning of minutes slew, for accurate setting of the time as broadcast by the National Bureau of Standards (NBS)...When the minutes are correct, B_1 is released.”). Again, Moyer fails to teach a display brightness control means. Kim teaches a display brightness control means for controlling the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means in column 2 lines 55-56 and 62-65, where it is described that the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments as illustrated in Figure 13. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer with Kim because this combination would provide the selective manipulation of display segments in which one segment would be brighter than the other segments thereby conserving energy.

Regarding claims 7 and 14, Moyer teaches a display means that comprises a self-luminous-type display device in column 1 lines 35-37.

Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428), in further view of Ogawa (US Patent 6,597,339).

Regarding claims 2, 9, Moyer and Kim fail to teach the limitations. Ogawa teaches a time counting means for counting an elapsed time period in column 8 lines 21-29, where it is described that a timer measures the time of an elapse time period. Ogawa also teaches that in response to the selection of a display segment by a manipulation means the display brightness control means controls the display means to increase the brightness of the selected display segment to a first predetermined value in column 5 lines 41-47 where it is described that when the user initially selects a display segment on the menu the brightness of the display is increased to a predetermined value as described in column 5 lines 12-13 and 32-45. Ogawa also teaches that when the time counting means has counted a predetermined elapsed time period, the display brightness control means controls the display means to decrease the brightness of the selected display segment to a second predetermined value lower than the first predetermined value, as described in column 8 lines 22-42. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim and Ogawa because this combination would provide a means to conserve energy by counting a predetermined time period in that when the time period has been reached, the brightness of the display is decreased.

Claims 5, 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428), in further view of Ogawa (US Patent 6,597,339), in further view of Lee (US Patent 6,157,169).

Regarding claims 5, 6, 10 and 11, Moyer and Kim fail to teach the limitations. Ogagwa teaches a display means to display an indicator for indicating a display brightness time of the display segment selected by the manipulation means and for controlling the display means to

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decrease the display brightness time indicated by the indicator in accordance with a time counted by the time counting means in column 3 lines 59-67 and column 4 lines 1-8, where it is described that the predetermined elapsed period of time determined by the CPU is sent directly to a display device, as illustrated in Figure 1. Ogawa also teaches in column 3 lines 59-67 and column 4 lines 1-8, the CPU sending the period of elapsed time and data that would enable the user to view and modify the level of luminance or brightness of the display. Ogawa fails to teach displaying an indicator that displays a time counted by the time counting means. Lee teaches a time indicator that displays a time counted by a time counting means in column 9 lines 46-49, and it is also illustrated in Figure 11. Therefore the elapsed time period determined by the CPU timer 101 in Figure 1 of Ogawa that is sent to the display device 28 illustrated in Figure 1, would be available for one of ordinary skill in the art to enable the determined elapsed time period to be displayed to user as illustrated by Lee in Figure 11. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim, Ogawa and Lee because this combination would provide a means to conserve energy by counting a predetermined time period in that when the time period has been reached, the predetermined elapsed time would be displayed and the brightness of the display would be decreased in response to the determined time period.

Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428), in further view of Ogawa (US Patent 6,597,339), in further view of Decker (US Patent 5,285,430).

Regarding claims 3 and 12, Kim teaches that during an elapsed time period, as described in column 2 lines 49-50 and column 6 lines 38-39, the display brightness control means controls the display means to decrease a lit time ratio of the selected display segment, as described in column 3 lines 1-9. Moyer, Kim and Ogawa fail to teach a display brightness control means. Decker teaches a display brightness control means that controls the display means to cause the display segment selected by a manipulation means to blink in column 3 lines 31-35. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim, Ogawa and Decker because this combination would provide selective display segment that blink and decrease in brightness over an elapsed time period, thereby conserving energy.

Claim 4, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428), in further view of Nakagiri (US Patent 4,513,282).

Regarding claims 4, 13 and 19, Moyer and Kim fail to teach the limitations. Nakagiri teaches a selection control means for selectively supplying one of the display segments as a first display segment having a first predetermined size, as described in lines 1-13 of the abstract, and another of the display segments as a second display segment having a second predetermined size smaller than the first predetermined size, as described in column 5 lines 25-30, where it is described that display segments may be individually selected and the size of each of those segments contain a predetermined size even and are modified, as described in column 12 lines 57-60, column 1 lines 64-67 and column 2 lines 1-2. Nakagiri also illustrates a display means to display the display segment selected as the first display segment and a display means to display

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the second display segment as one of the display segments other than the display segment selected by the manipulation means, in Figure 15 and 16 respectively. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim and Nakagiri because this combination would provide selectable display segments that may be altered in size for display, which improves the visibility of display segments of interest during manipulation.

Regarding claim 15, Moyer and Kim teach all the limitations except a control means for controlling the display so that the display segment selected by the selecting means has a font larger than that of the other display segments. Moyer illustrates a portable electronic apparatus in Figure 1, as recited in the preamble. Moyer also teaches a display means for displaying a plurality of display segments in column 2 lines 18-20, and also illustrates indicating time in a display mode in element 11 of Figure 1. Moyer also teaches a selecting means for selecting any one of the display segments displayed by the display means in column 7 lines 60-67 and column 8 lines 1-4, where it is described that the button B₃, as illustrated in Figure 1, would be used to select display segments of the display. Moyer also teaches selecting a displayed time segment in which the time indicated in the time display mode is corrected from column 7 lines 60-67 to column 8 lines 1-19 ("Consequently, when only the push button B₃ is depressed, the hours are being displayed and will be advanced. That is done by slewing the unit hours counter, i.e., by applying clock pulses at a rate of 1 Hz...In addition to slewing the minutes counter, the seconds counters 64 and 66 are instantaneously reset to zero at the beginning of minutes slew, for accurate setting of the time as broadcast by the National Bureau of Standards (NBS)...When the minutes are correct, B₁ is released."). Again, Moyer and Kim fail to teach a control means for controlling the display so that the display segment selected by the selecting means has a font

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larger than that of the other display segments. Nakagiri teaches a control means for selectively supplying one of the display segments as a first display segment having a first size, as described in lines 1-13 of the abstract, and it is also described that the size of the display segments may be individually selected, as described in column 1 lines 64-67 and column 2 lines 1-2, and modified, as described in column 12 lines 57-60. Nakagiri also teaches selecting a display segment, in column 12 lines 37-41 (“...any particular display segment may be selected for excitation as required, to be used in forming a numeral or character, or for providing an indicating marker to designate a numeral or to connect a pair of numerals...”), in which the size of the segment may be adjusted to a different size in column 1 lines 54-64 (“...display device for displaying characters and numerals by means of a matrix of display segments of predetermined shape and position) with the advantage of flexibility in displaying various numerals and characters and of changing the size and position of these...” and in column 2 lines 1-20 (“These basic segment units can be individually excited... In addition, the size of a numeral or character can be altered freely, as desired, by increasing the number of segments used to form it. In addition, various sizes of numerals or characters...”). It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim and Nakagiri because this combination would provide the selective manipulation of display segments in which one segment would be larger than the other segments, which improves the visibility of the display segments and conserves energy.

Regarding claim 16, Moyer teaches a display means that comprises a self-luminous-type display device in column 1 lines 35-37.

Regarding claim 17, Moyer fails to teach a display brightness control means. Kim teaches a display brightness control means for controlling the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means in column 2 lines 55-56 and 62-65, where it is described that the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments as illustrated in Figure 13. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer with Kim because this combination would provide the selective manipulation of display segments in which one segment would be brighter than the other segments thereby conserving energy.

Regarding claim 18, Moyer teaches a portable electronic apparatus that comprises a timepiece in Figure column 2 lines 19-21 and is illustrated in Figure 1. Moyer also teaches display segments that comprise time display segments for displaying time in column 3 lines 1-4, and is also illustrated in Figure 1 as elements 30, 32, 34 and 36.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428), in further view of Nakagiri (US Patent 4,513,282), in further view of Decker (US Patent 5,285,430).

Regarding claim 20, Kim teaches that during an elapsed time period, as described in column 2 lines 49-50 and column 6 lines 38-39, the display brightness control means controls the display means to decrease a lit time ratio of the selected display segment, as described in column 3 lines 1-9. Moyer, Kim and Nakagiri fail to teach a display brightness control means. Decker

teaches a display brightness control means that controls the display means to cause the display segment selected by a manipulation means to blink in column 3 lines 31-35. It would have been obvious to one of ordinary skill in the art to combine the teachings of Moyer, Kim, Nakagiri and Decker because this combination would provide selective display segment that blink and decrease in brightness over an elapsed time period, thereby conserving energy.

Response to Arguments

Applicant's arguments filed 3/27/2006 have been fully considered but they are not persuasive.

The applicant argues that the references Moyer (US Patent 4,026,101) in view of Kim (US Patent 6,661,428) used in the 35 U.S.C. 103(a) rejection of claims 1 and 8 do not teach a function to select any one of the display segments displayed by the display means in the time display mode for modification of the selected display segment in a time correction mode in which the time indicated in the time display mode is corrected. The examiner maintains the rejection because Moyer teaches selecting a displayed time segment in which the time indicated in the time display mode is corrected, as described from column 7 lines 60-67 to column 8 lines 1-19 ("Consequently, when only the push button B₃ is depressed, the hours are being displayed and will be advanced. That is done by slewing the unit hours counter, i.e., by applying clock pulses at a rate of 1 Hz...In addition to slewing the minutes counter, the seconds counters 64 and 66 are instantaneously reset to zero at the beginning of minutes slew, for accurate setting of the

time as broadcast by the National Bureau of Standards (NBS)...When the minutes are correct, B₁ is released.“).

The applicant argues that the references Moyer in view of Kim in further view of Nakagiri (US Patent 4,513,282) used in the 35 U.S.C. 103(a) rejection of claims 15 do not teach a control means for controlling the display so that the display segment selected by the selecting means has a font size larger than that of the other display segments displayed by the display. The examiner maintains the rejection because Nakagiri teaches selecting a display segment, in column 12 lines 37-41 (“...any particular display segment may be selected for excitation as required, to be used in forming a numeral or character, or for providing an indicating marker to designate a numeral or to connect a pair of numerals...”), in which the size of the segment may be adjusted to a different size in column 1 lines 54-64 (“...display device for displaying characters and numerals by means of a matrix of display segments of predetermined shape and position) with the advantage of flexibility in displaying various numerals and characters and of changing the size and position of these...”)) and in column 2 lines 1-20 (“These basic segment units can be individually excited... In addition, the size of a numeral or character can be altered freely, as desired, by increasing the number of segments used to form it. In addition, various sizes of numerals or characters...”)) and therefore would be capable of selecting a particular display segment and enable that segment to be larger than the other displayed segments.

The applicant argues that the references Moyer in view of Kim used in the 35 U.S.C. 103(a) rejection of claims 1 and 8 do not teach the selected display segment has a display brightness higher than that of other display segments displayed by the display. The examiner maintains the rejection because Kim teaches a display brightness control means for controlling

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the display means so that the display segment selected by the manipulation means has a display brightness higher than that of the other display segments displayed by the display means in column 2 lines 55-65 (“...method for controlling a luminance of a flat display... all scan lines desired to display brighter than other scan lines... a plurality of data lines desired to display brighter while the driving data on rest of the data line are masked, for driving the data lines, selectively.”), where it is described that the luminance or brightness of the display is controlled where data lines of the display are selectively displayed brighter than the other displayed segments as illustrated in Figure 13.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Broome
6/7/2006 SB